



## Rabbit Anti-Dscam antibody

SL11456R

<b>Product Name:</b>	Dscam
<b>Chinese Name:</b>	唐氏综合征Cell adhesion molecule抗体
<b>Alias:</b>	CHD2 42; CHD2 52; CHD2; Down syndrome cell adhesion molecule; DSCAM; DSCAM_HUMAN; human CHD2-52 down syndrome cell adhesion molecule 2, 9; OTTHUMP00000109193 2; SD11109p.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	220kDa
<b>Cellular localization:</b>	The cell membraneSecretory protein
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Dscam:301-400/2012<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	DSCAM is a cell adhesion molecule belonging to the immunoglobulin superfamily. It is predominantly expressed in brain and contains six Fibronectin type-III domains and ten Ig-like C2-type domains. In mice, DSCAM is responsible for regulating isoneuronal self-avoidance, the tendency for sister arbors to avoid crossing each other and to spread

out proportionately over an area. Isoneuronal self-avoidance is important for proper terminal branching (arborization). In some cell types, DSCAM also mediates heteroneuronal self-avoidance, which is important for the regular spacing of cell bodies and the prevention of hyperfasciculation. In humans, two DSCAM isoforms exist due to alternative splicing. The long isoform (also known as CHD2-42) is a single pass type I membrane protein, while the short isoform (CHD2-52), which lacks the C-terminal transmembrane containing region (amino acids 1572-2012), is secreted.

**Function:**

Cell adhesion molecule that plays a role in neuronal self-avoidance. Promotes repulsion between specific neuronal processes of either the same cell or the same subtype of cells. Mediates within retinal amacrine and ganglion cell subtypes both isoneuronal self-avoidance for creating an orderly dendritic arborization and heteroneuronal self-avoidance to maintain the mosaic spacing between amacrine and ganglion cell bodies. Receptor for netrin required for axon guidance independently of and in collaboration with the receptor DCC. In spinal chord development plays a role in guiding commissural axons projection and pathfinding across the ventral midline to reach the floor plate upon ligand binding. Enhances netrin-induced phosphorylation of PAK1 and FYN. Mediates intracellular signaling by stimulating the activation of MAPK8 and MAP kinase p38.

**Subunit:**

Interacts with DCC; the interaction is abolished in response to NTN1 (By similarity). Probably found in a ternary complex composed of DSCAM, PAK1 and RAC1. Interacts (via extracellular domain) with NTN1. Interacts (via cytoplasmic domain) with PAK1; the interaction is direct and enhanced in presence of RAC1. Interacts with RAC1; the interaction requires PAK1.

**Subcellular Location:**

Secreted and Cell membrane. Localized in the soma, cell membrane, axon and growth cone of dissociated commissural axons.

**Tissue Specificity:**

Primarily expressed in brain.

**Post-translational modifications:**

Phosphorylated at tyrosine residues. Phosphorylation is enhanced by netrin.

**Similarity:**

Contains 6 fibronectin type-III domains.

Contains 10 Ig-like C2-type (immunoglobulin-like) domains.

**SWISS:**

O60469

**Gene ID:**

1826

**Database links:**

[Entrez Gene: 1826](#)Human

[Entrez Gene: 13508](#)Mouse

[Entrez Gene: 171119](#)Rat

[Omin: 602523](#)Human

[SwissProt: O60469](#)Human

[SwissProt: Q9ERC8](#)Mouse

[SwissProt: Q8VHZ8](#)Rat

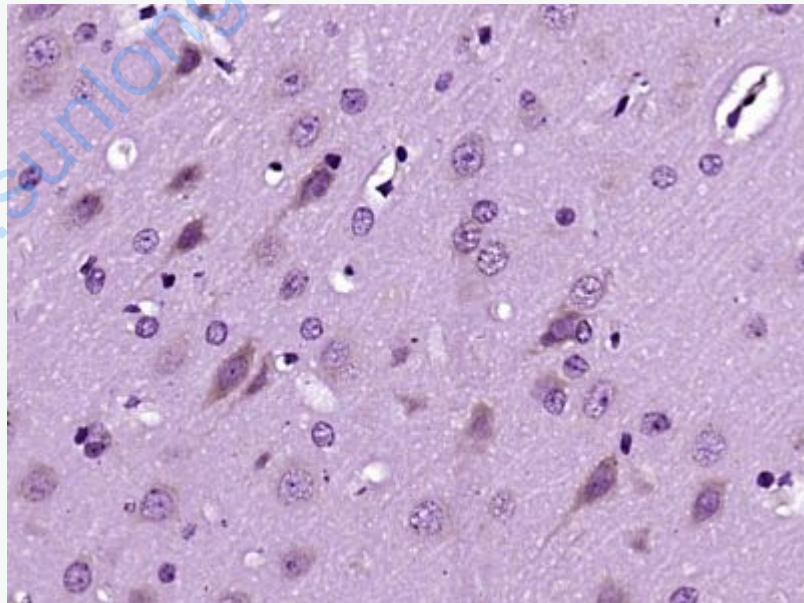
[Unigene: 397800](#)Human

[Unigene: 24399](#)Rat

**Important Note:**

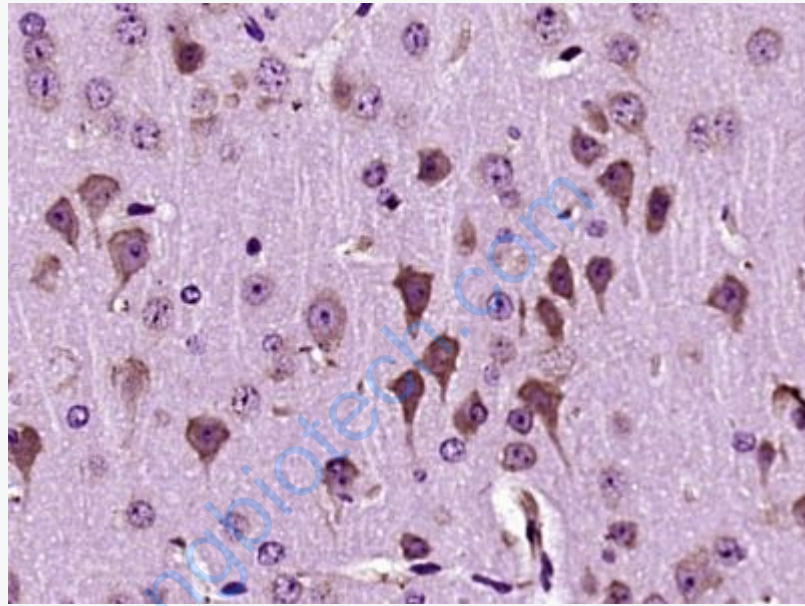
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**Picture:**



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for

30min; Antibody incubation with (Dscam) Polyclonal Antibody, Unconjugated (SL11456R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Dscam) Polyclonal Antibody, Unconjugated (SL11456R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.